

LISTING OF THE CLAIMS:

Please amend claims 1 and 38, and add new claims 39-40 as follows. A complete listing of the claims with proper claims identifiers follows for the convenience of the Examiner.

1-27. (Canceled)

28. (Currently amended) A method of preparing and using a coil spring in a pressure relief valve comprising:

- a) measuring the spring rate of the coil spring;
- b) modifying the spring after measuring its spring rate so as to modify its spring rate to be within $\pm 2\%$ of a target spring rate; and
- c) building a pressure relief valve having an inlet comprising an inlet valve seat, a disk member closable on the inlet valve seat and a mechanism biasing the disk member on the inlet valve seat, a body, and an outlet, wherein the disk member and inlet valve seat are configured to provide a huddling chamber, with the modified coil spring being used in the biasing mechanism.

29. (Withdrawn) The method of claim 28 wherein the spring rate is modified by having one or more disk springs stacked in series with the coil spring.

30. (Withdrawn) The method of claim 28 wherein the spring rate is modified by shorting out a portion of the coils of the spring.

31. (Original) The method of claim 28 wherein the spring rate is modified by having a portion of the surface of the spring removed.

32. (Withdrawn) The method of claim 31 wherein the spring has material removed from its inside diameter.

33. (Original) The method of claim 31 wherein the spring has material removed from its outside diameter.

34. (Withdrawn) The method of claim 28 wherein the spring rate is modified by mechanically enlarging the internal diameter of the spring.

35-36. (Canceled)

37. (Previously presented) The method of claim 28 wherein the outlet is located in the body radially of the huddling chamber.

38. (Currently amended) The method of claim 28 wherein the relief valve further comprises a secondary orifice between the inlet valve seat and the outlet, the ~~secondary orifice being sized~~ inlet being configured so that gas flows from the inlet valve seat in a sonic flow when the valve opens due to a pressure in the inlet exceeding the set pressure and the secondary orifice being sized so that gas flows through the secondary orifice in a sonic flow when the valve opens due to a pressure in the inlet exceeding a the set pressure.

39. (New) The method of claim 28 wherein the spring is built into a valve having a blow-down value of less than about 10%.

40. (New) The method of claim 28 wherein the spring is built into a valve having a blow-down value of less than about 5%.